

Date: Thursday, 11/06/2009 11:54:28 AM
User: Julie Dawson

Process Sheet

Customer	CU-DAR001 Dart Helicopters Services			Drawing Name	TUBE ASSEMBLY		
Job Number	48484			Part Number	D2003033		
Estimate Number	10105			Drawing Number	D2003 UNDER REVIEW		
P.O. Number				Project Number	N/A		
This Issue	11/06/2009	S.O. No.	:	Drawing Revision	B		
Prsht Rev.	NC			Material			
First Issue	/ /	Type	SMALL /MED FAB	Due Date	19/06/2009	Qty:	6
Previous Run	38550			Um:	Each		
Written By							
Checked & Approved By	STU 09.06.11						
Comment	Est Rev:B 99.11.11 Re-format EC						

Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :	
1.0	M304TR0500W035	304 RD Tube .500 x .035W	M-h 09/06/18
		Comment: Qty.: 2.5914 f(s)/Unit Total : 15.5484 f(s) Pick: Material: 1/2"AE x 0.035" wall AISI 304 SS tubing	1,1742 111097 3X 1,1742 M10825d 3X
2.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1	6X
		Comment: SMALL & MEDIUM FAB RESOURCE 1 1-Form tube as per template D2003-033	M-h 09/06/18
3.0	QC5	INSPECT WORK TO CURRENT STEP	S 09/06/18 (+6)
		Comment: INSPECT WORK TO CURRENT STEP	
4.0	M26506	Firesleeve-crkl .375IDia	*
		Comment: Qty.: 2.6030 f(s)/Unit Total : 15.6177 f(s) Pick: Material: M2650-6 Heat sleeve Batch: _____	M 106781
5.0	MS208198J	Sleeve	*
		Comment: Qty.: 2.0000 Each(s)/Unit Total : 12.0000 Each(s) Qty Part# Desc Batch: 2 MS20819-8J Sleeve	M-h 09/06/19

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 11/06/2009 11:54:28 AM
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Drawing Name: TUBE ASSEMBLY

Job Number: 48484

Part Number: D2003033

Job Number:



Seq. #: Machine Or Operation:

Description :

6.0 AN8188J

Nut



Comment: Qty.: 2.0000 Each(s)/Unit Total : 12.0000 Each(s)

Qty Part# Desc Batch:
2 AN818-8J Nut

M107959 : M-f 09/06/19 *

7.0 D2182045

Heat Shrink 4.5" Long



Comment: Qty.: 1.0000 Each(s)/Unit Total : 6.0000 Each(s)

1 D2182-045 Heat Shrink 4.5" Long Batch:

B218643 M-f 09/06/19 *

8.0 SMALL FAB 1

SMALL & MEDIUM FAB RESOURCE 1



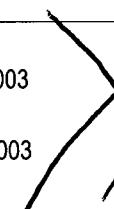
(6x)

Comment: SMALL & MEDIUM FAB RESOURCE 1

1-Cut: 304 Tubing 29.62" long as per Dwg D2003

2-Cut: Heat Sleeve 29.75" long as per Dwg D2003

3-Assemble as per Dwg D2003



m-f 09/06/22

9.0 QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

S09/06/22 (x6)

10.0 PACKAGING 1

PACKAGING RESOURCE #1



(1a)

Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: 193

9/4/22

SD

11.0 QC21

FINAL INSPECTION/W/O RELEASE



09/06/23 JH

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



MF
09-06-22

W/O:		WORK ORDER CHANGES					
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NOTE: Date & initial all entries

DART



DESIGN <i>4</i>	DRAWN BY <i>JP</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>AE</i>	APPROVED <i>JP</i>	DRAWING NO. D2003	
DATE 99.06.08		TITLE 206 CABIN HEATER TUBE ASSEMBLIES NTS	
		SCALE	
A	90.04.09	NEW ISSUE	
B	99.06.08	UPDATE PER TEMPLATES; ADD P/N'S; 0.025 TUBING NOW 0.035 (TSR1049)	

RELEASED
49.06.08 RE

UNDER REVIEW

CC.08.21 CB

Some flat
lengths wrong

P/N	TEMPLATE	HEATSLEEVE LENGTH ¹	CUT LENGTH ² OF TUBE	MS20819-8J SLEEVE	AN818-8J NUT	MS20819-8D SLEEVE	AN818-8D NUT	MS20819-6D SLEEVE	AN818-6D NUT	DESC.	MATERIAL ^{4/87}	VENDOR OR SPEC
D2003-001	T2003-001	5.2	6.00					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-003	T2003-003	7.3	8.12					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-005	T2003-005	9.8	10.62					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-007	T2003-007	20.0	19.63					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-009	T2003-009	12.38	12.44					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-011	T2003-011	33.31	32.38					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-013	T2003-013	12.7	13.54					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-015	T2003-015	17.2	18.00					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-017	T2003-017	17.0	16.25					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-019	T2003-019	9.8	10.62			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-021	T2003-021	N/A	2.25			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-023	T2003-023	4.5	5.33			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-025	T2003-025	9.8	10.60			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-027	T2003-027	7.25	7.38			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-029	T2003-029	17.2	18.00			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-700/6
D2003-031	T2003-031	14.6	15.38	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-033	T2003-033	29.75	29.62	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-035	T2003-035	24.7	27.00	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-037	T2003-037	24.81	23.38	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-039	T2003-039	34.0	34.00	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-041	T2003-041	6.0	5.88	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-043	T2003-043	11.7	10.75	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-045	T2003-045	3.50	2.44	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-047	T2003-047	5.56	5.56	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-049	T2003-049	33.2	34.00	2	2					TUBE ASS'Y	CRES 0.500 OD x 0.035 W	AISI 304
D2003-077	T2003-077	N/A	6.25					1	1	JET	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-101	T2003-101	13.25	13.13					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-103	T2003-103	12.38	12.00					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-105	T2003-105	10.75	10.60					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-107	T2003-107	12.75	12.25					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-600/6
D2003-109	T2003-109	8.25	8.125			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-600/6
D2003-111	T2003-111	4.75	4.625			2	2			TUBE ASS'Y	6061-T6 0.500 OD x 0.035 W	WW-T-600/6
D2003-116	T2003-116	4.0								HEATSLEEVE	M2650-20 CRINKLE-SOFT	STRATOFLEX
D2003-120	T2003-120	4.0								HEATSLEEVE	M2650-16 CRINKLE-SOFT	STRATOFLEX
D2003-14	T2003-14	4.0								HEATSLEEVE	M2650-14 CRINKLE-SOFT	STRATOFLEX
D2003-16	T2003-16	4.0								HEATSLEEVE	M2650-16 CRINKLE-SOFT	STRATOFLEX
D2003-205	T2003-205	9.75	9.60					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
D2003-207	T2003-207	3.75	3.75					2	2	TUBE ASS'Y	6061-T6 0.375 OD x 0.035 W	WW-T-700/6
											SHIP C/O	
											RETURN TO	

UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN	DRAWN BY CP	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
CHECKED <i>AE</i>	APPROVED <i>CP</i>	DRAWING NO. D2003
DATE 99.06.08	TITLE 206 CABIN HEATER TUBE ASSEMBLIES NTS	REV. B SHEET 2 OF 2 SCALE

RELEASED

99.06.09 KE

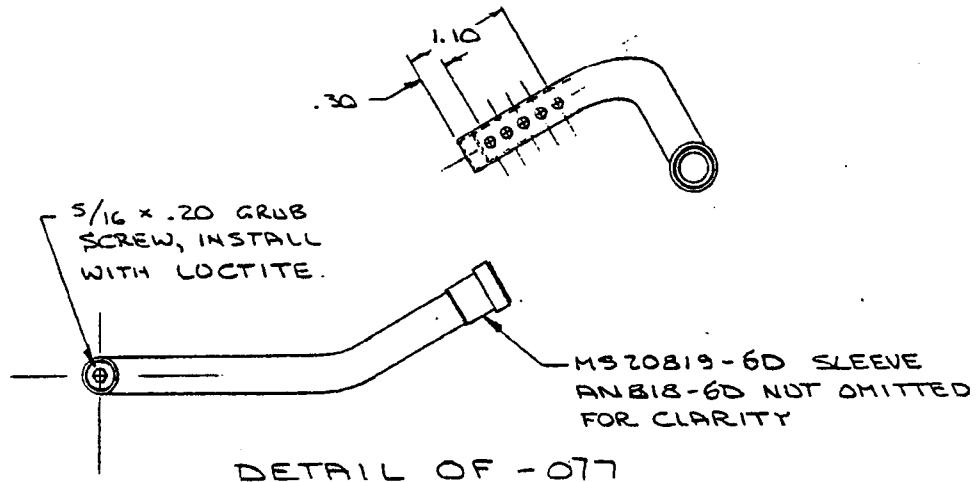
UNDER REVIEW

06.08.21 CB

Some flat lengths
~~were~~ wrong

Notes:

- (1) USE STRATOFLEX M2650-6 CRINKLE-SOFT HEATSLEEVE.
- (2) TUBING ASSEMBLIES TO BE CUT AND BENT IN ACCORDANCE WITH TEMPLATES.
- (3) TUBES TO BE FLARED 30° TO MATE WITH FITTINGS MADE TO MS33514.
- (4) ENSURE SEAMLESS TUBING IS USED.
- (5) INSTALL HEATSLEEVE OVER ALL TUBES WITH A DESIGNATED LENGTH OF HEATSLEEVE PER THE PARTS LIST.
- (6) 5052 (WW-T-700/4) TUBING MAY BE SUBSTITUTED WHEN 6061 TUBING IS NOT AVAILABLE.
- (7) 0.049 WALL THICKNESS CRES TUBING MAY BE SUBSTITUTED WHEN 0.035 IS NOT AVAILABLE.
- (8) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED.



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WORK ORDER
NO. *18481*

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